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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,766	05/22/2002	Hajime Kurosawa	011600	3012

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EXAMINER

MOYER, MICHAEL J

ART UNIT PAPER NUMBER

2675

DATE MAILED: 12/12/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,766

Applicant(s)

KUROSAWA ET AL.

Examiner

Michael J. Moyer

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 22 May 2002 has been considered. Before claims 1-6 were pending and now claims 1-6 are still pending. Claims 5 and 6 have been amended in order to place them in the proper multiple dependent form.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rucker et al. (hereinafter "Rucker"), US 5,351,066.

As pertaining to claim 1, Rucker discloses a regular keyboard in which alphanumeric characters and symbols can be inputted (figs. 1A-1B) by any and all digits of a single hand or both hands, in which the fingers and thumbs (digits) have certain home keys and home rows and home positions for each, just like a regular keyboard, in which one person knows how to type. Furthermore, the keyboard has two space bars halves that are juxtaposed right and left front keys 22 and 24 (col. 11, line 67-col. 12, line 29).

As pertaining to claim 1, Rucker does not disclose that one of the keys 22 and 24 can be enter/return key. However, Rucker does disclose the one of the keys 22 or 24 can be programmed to be correspond to letter, number, cursor movement or other designations. Therefore, it would be obvious that other designations could be a enter/return key (col. 11, line 67-col. 12, line 29).

As pertaining to claim 2, Rucker discloses that the keyboard can be optionally preset before actual use by an operator which of the right and the left front keys to be allocated to a front enter/return key and space key or whether both of the right and left front keys to a space key (col. 11, line 67-col. 12, line 29; figs. 1A-1B). Claim 2 is dependent on claim 1 and is rejected on the same basis and what is stated above.

As pertaining to claim 5, Rucker discloses that keys can be programmed to facilitate other keys, therefore it would be obvious that the existing enter/return key at the extreme right of the upper and/or central row in the middle key array can be replaced with a backspace key and/or other operational key or symbol keys of high frequency (col. 11, line 67-col. 12, line 29). Claim 5 is dependent on claim 1 or 2 and is rejected on the same basis and what is stated above.

As pertaining to claim 6, Rucker discloses that the keyboard can be separated of foldably divided into right and left halves, said pair of right and left front keys functioning either as a enter/return key or space key and being included in said right and left halves (col. 2, line 25-col. 3, line 41; figs. 3-4). Claim 6 is dependent on claim 1 or 2 and is rejected on the same basis and what is stated above.

3. **Claims 3-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Rucker as applied to claims 1 and 2 above, and further in view of Sumiyoshi et al. (hereinafter "Sumiyoshi"), US 6,278,497 B1.

As pertaining to claims 3-4, Rucker discloses what has previously been stated above.

As pertaining to claims 3-4, Rucker does not disclose the use of 101/104 English keyboard or a 106/109 Japanese keyboard.

As pertaining to claims 3-4, Sumiyoshi discloses a keyboard that can be either a 101 English keyboard or a 106 Japanese keyboard.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the keyboard of Sumiyoshi with the keyboard of Rucker.

The suggestion/motivation for doing so would have been to provide different types keyboards with the functions that two front keys can either be a enter/return key and space key or neither. Claims 3-4 are dependent on claims 1-2, respectively and are rejected on the same basis and what is stated above.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Weeks, US 5,880,685. Weeks teaches a computer keyboard with accessory platform.
- b) Hayashi et al., US 5,788,386. Hayashi teaches a compact ergonomic keyboard.
- c) Klauber, US 5,711,624. Klauber teaches a keyboard with thumb activated backspace/erase key.
- d) Lowell et al., US 6,237,846 B1. Lowell teaches a body wearable keyboard.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael J. Moyer** whose telephone number is **(703) 305-2099**. The examiner can normally be reached Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Steven Saras**, can be reached at **(703) 305-9720**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose **telephone number is (703) 306-0377**.

Michael J. Moyer
Examiner
Art Unit 2675

MJM
December 8, 2003

A handwritten signature in black ink, appearing to read 'Steven Saras', written in a cursive style.

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600